

## **REMARKS**

Applicants have considered the office action mailed July 27, 2004 in connection with the above-identified patent application.

### **Amendments to the Claims**

Claims 1–47, 49, 50, 52–59, and 61–100 are pending in the instant Application. Applicants amend claim 15 to correct an informality of antecedent basis, and amend claim 75 to delete a repeated indefinite article. No new matter is introduced by way of these Amendments and, accordingly, entry thereof is respectfully requested.

## **REJECTIONS OF THE CLAIMS**

### **Rejections under 35 U.S.C. § 103**

The Examiner has rejected all of the pending claims (1–47, 49, 50, 52–59, 61–100) under 35 U.S.C. § 103(a) as allegedly being obvious over one or more cited references. Because the theory and manner of the Examiner's rejection is substantially the same for each pending claim, and in the interests of providing a succinct format for response, Applicants first address the underlying basis of the Examiner's rejection as it applies to all rejected claims before turning to the rejections of individual claims.

#### *The allegation that various foam compositions are obvious*

Applicants' claims recite, variously, "foam compositions" containing differing components. The Examiner has rejected every claim except claim 81 as being allegedly obvious over a single cited reference that purportedly discloses a formulation with the same components, in the same proportions, as recited in Applicant's claims. In respect of claim 81, the rejection is over a pair of cited references. In each case, by the Examiner's own admission, the cited reference (or references) do(es) "not teach, with sufficient specificity, a foam composition." Instead, for each rejection:

"the Examiner asserts that the compositions as taught by [the cited reference(s)] would have the same foam properties as the compositions recited by the instant claims because [the cited reference(s)] teach[es] compositions containing the same components in the same proportions as recited by the instant claims, including surfactants which have foaming properties. Additionally this foam would necessarily have a gas present such as air."

Based on this assertion, the Examiner goes on to conclude that, in respect of each pending claim:

“[i]t would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a foam composition containing [the claimed composition] in the specific proportions as recited by the instant claims, with a reasonable expectation of success and similar results with respect to other disclosed components, because the broad teaching of [the cited reference] suggest a foam composition containing [the claimed composition].”

Applicants respectfully traverse the various rejections under 35 U.S.C. § 103(a) because the Examiner has failed to make out a *prima facie* case of obviousness.

The U.S. Patent and Trademark Office (“PTO”) bears the burden of establishing a *prima facie* case of obviousness. *In re Bell*, 991 F.2d 781, 26 USPQ2d 1529 (Fed. Cir. 1993). To establish a *prima facie* case, the PTO must satisfy three basic criteria. First, the prior art reference, or references when combined, must teach or suggest each and every limitation of the claimed invention. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify or combine the reference teachings in the manner suggested by the PTO. *In re Rouffet*, 149 F.3d 1350, 47 USPQ2d 1453 (Fed. Cir. 1998). Finally, the skilled artisan, in light of the teachings of the prior art, must have a reasonable expectation that the modification or combination suggested by the PTO would be successful. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). If any one of these criteria is not met, *prima facie* obviousness is not established.

Assuming, for the sake of argument, that in each articulated rejection, the composition recited in the claims can be found in the respective cited reference(s), the Examiner has not made out a *prima facie* case because he has established neither a specific teaching in the art that shows a foam being created from the recited composition, nor a motivation to do so. Instead, the Examiner’s analysis is conclusory, and is lacking the “clear and particular” evidence required by law to show why one of ordinary skill in the art would be motivated to make a foam from a composition known in the art. *In re Dembiczak*, 175 F.3d 994, 50 USPQ.2d 1614 (Fed. Cir. 1999). Not only must the showing of a motivation to combine teachings in the art be clear and particular, it must be supported by *actual evidence*. *Id.* Broad conclusory statements regarding the teachings of art are not ‘evidence’. *Id.* The

burden of obviousness by combination can be satisfied “only by some objective teaching [leading to the combination]”. *In re Fritch*, 972 F.2d 1260, 1265, 23 USPQ.2d 1780, 1783 (Fed. Cir. 1992). Such actual objective evidence is essential to avoid the impermissible use of hindsight. *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ.2d 1596, 1600 (Fed. Cir. 1988).

Furthermore, by asserting that compositions found in the cited references would have the same properties as Applicant’s claimed foam compositions because of the presence of surfactant and air, the Examiner appears to be stating that Applicant’s composition, by virtue of containing air (in an unspecified amount) must automatically be a foam. However, this reasoning is flawed for the following reasons. First, the mere presence of air in a liquid does not create a foam. As the Examiner surely appreciates, a variety of liquids are handled in everyday situations without foaming, despite containing trace amounts of dissolved air. Second, Applicant’s specification states that: “a foam comprises an agglomeration of bubbles separated from each other by thin liquid films.” (Specification, page 11, lines 6–7.) The Examiner has not identified such an agglomeration of bubbles in any of the cited references. Furthermore, Applicant’s specification demonstrates that the bubbles are created by passing a gas through the composition. (Specification as filed, page 15, lines 28–29). None of the cited references teaches such an operation of passing a gas through the respective compositions.

Accordingly, Applicants respectfully submit that the foam compositions recited in claims 1–47, 49, 50, 52–59, and 61–100 are not obvious over the cited references because none of the references teaches creating a foam from the compositions contained therein, and because a composition alone cannot – without more – be characterized as a foam.

*The rejection over Small (Pub. No. 2002/0037820)*

Claims 1–7, 13–18, 21–47, 49, 50, 52–59, 61, 68–80, 82–90, and 92–100 have been rejected under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent Application publication No. 2002/0037820 to Small, *et al.* (“Small”). Applicants respectfully traverse the rejection on the grounds that the Examiner has failed to show that every element of the rejected claims is found in the cited reference.

First, as stated hereinabove, Small is silent as to foam compositions. Accordingly, the motivation to create a foam from the compositions disclosed in Small must come from elsewhere in the art. The Examiner has not provided such a motivation or any actual evidence thereof, either from a cited reference, or from within the knowledge of an artisan of ordinary skill.

Furthermore, Applicant respectfully points out that all of the compositions in Small contain a fluoride. Applicant's claims 42-47, 49, 50, 52-59, 61, 68-74, 79, 80, 82-90, and 92-100 do not contain a fluoride. Accordingly, Small cannot render obvious the compositions recited in the aforementioned claims without some motivation to substitute some other ingredient for the fluoride in Small's compositions. Again, the Examiner has not provided any evidence showing such a motivation.

Accordingly, Applicant respectfully submits that claims 1-7, 13-18, 21-47, 49, 50, 52-59, 61, 68-80, 82-90, and 92-100 are not obvious over Small and request that the rejection of record be removed.

*The rejection over Torii*

The Examiner has rejected claims 1-4, 7-12, 15-18, and 20-23 under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent No. 5,972,862 to Torii, *et al.* ("Torii"). Applicants respectfully traverse the rejection on the grounds that the Examiner has failed to show that every element of the rejected claims is found in the cited reference.

First, as stated hereinabove, Torii is silent as to foam compositions. Accordingly, the motivation to create a foam from the compositions disclosed in Torii must come from elsewhere in the art. The Examiner has not provided such a motivation, either from a cited reference, or from within the knowledge of an artisan of ordinary skill.

In making his rejection, the Examiner has asserted that quaternary ammonium compounds, component D in the compositions of Torii, are equivalent to Applicants' claimed surfactants. However, no basis for this equivalence has been presented. Applicants disagree with this identification of Torii's quaternary ammonium compounds because Torii's compositions may optionally, and *additionally*, contain surfactants, referred to as component E. See Torii, col. 7, line 62 - col. 8, line 35. Therefore, Applicants respectfully submit that the quaternary ammonium compounds in Torii are not functioning as surfactants. Accordingly, the only compositions disclosed in Torii that contain surfactants also contain either a quaternary ammonium compound (component D), or an organic carboxylic acid ammonium/amine salt (component D'). Since none of Applicant's recited compositions contains such a component, and the Examiner has provided no motivation to substitute such a component with one of Applicant's recited components, Applicants respectfully submit that claims 1-4, 7-12, 15-18, and 20-23 are not obvious over Torii.

Additionally, all of the compositions disclosed in Torii contain an inorganic and/or organic acid. None of the compositions recited in claims 1-4, 7-12, 15-18, and 20-23

contains an acid. Accordingly, Torii cannot render obvious the compositions recited in the aforementioned claims without some motivation to substitute some other ingredient for the acid in Torii's compositions. The Examiner has not provided such a motivation.

Accordingly, Applicant respectfully submits that claims 1–74, 7–12, 15–18, and 20–23 are not obvious over Torii and request that the rejection of record be removed.

*The rejection over Cheng*

The Examiner has rejected claims 1–7, and 15 under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent No. 6,235,693 to Cheng, *et al.* (“Cheng”). Applicants respectfully traverse the rejection on the grounds that the Examiner has failed to show that every element of the rejected claims is found in the cited reference.

As stated hereinabove, Cheng is silent as to foam compositions. Accordingly, the motivation to create a foam from the compositions disclosed in Cheng must come from elsewhere in the art. The Examiner has not provided such a motivation, either from a cited reference, or from within the knowledge of an artisan of ordinary skill.

Accordingly, Applicant respectfully submits that claims 1–7, and 15 are not obvious over Cheng and request that the rejection of record be removed.

*The rejection over U.S. Pat. No. 6,248,704 to Small*

The Examiner has rejected claims 1–12 under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Pat. No. 6,248,704, to Small, *et al.*, (“the ’704 patent”). Applicants respectfully traverse the rejection on the grounds that the Examiner has failed to show that every element of the rejected claims is found in the cited reference.

As stated hereinabove, the ’704 patent is silent as to foam compositions. Accordingly, the motivation to create a foam from the compositions disclosed in the ’704 patent must come from elsewhere in the art. The Examiner has not provided such a motivation, either from a cited reference, or from within the knowledge of an artisan of ordinary skill.

Accordingly, Applicant respectfully submits that claims 1–12 are not obvious over the ’704 patent, and request that the rejection of record be removed.

*The rejection over Honda*

The Examiner has rejected claims 79, 80, 82, and 84–100 under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Pat. No. 5,798,323 to Honda, *et al.* (“Honda”). Applicants

respectfully traverse the rejection on the grounds that the Examiner has failed to show that every element of the rejected claims is found in the cited reference.

First, as stated hereinabove, Honda is silent as to foam compositions. In fact, Honda teaches away from using foam compositions because it refers to use of “antifoamers” (see, e.g., col. 6, lines 32–33). Accordingly, the motivation to create a foam from the compositions disclosed in Honda must come from elsewhere in the art. The Examiner has not provided such a motivation, either from a cited reference, or from within the knowledge of an artisan of ordinary skill.

Accordingly, Applicant respectfully submits that claims 79, 80, 82, and 84–100 are not obvious over Honda, and request that the rejection of record be removed.

*The rejection over Brigham*

The Examiner has rejected claims 62–67 under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent Application Publication No. 2003/0073593 to Brigham, *et al.* (“Brigham”). Applicants respectfully traverse the rejection on the grounds that the Examiner has failed to show that every element of the rejected claims is found in the cited reference.

First, as stated hereinabove, Brigham is silent as to foam compositions. Accordingly, the motivation to create a foam from the compositions disclosed in Brigham must come from elsewhere in the art. The Examiner has not provided such a motivation, either from a cited reference, or from within the knowledge of an artisan of ordinary skill.

Furthermore, all of the compositions disclosed in Brigham contain a chloride ion source and a sulfate ion source. None of the compositions recited in claims 62–67 contains a chloride ion source and a sulfate ion source. Accordingly, Brigham cannot render obvious the compositions recited in the aforementioned claims without some motivation to substitute some other ingredient for the chloride/ sulfate ion sources in Brigham’s compositions. The Examiner has not provided such a motivation.

Accordingly, Applicant respectfully submits that claims 62–67 are not obvious over Brigham, and request that the rejection of record be removed.

*The rejection over U.S. Pat. No. 6,248,704 in view of Skee*

Claim 81 stands rejected under 35 U.S.C. § 103(a) as allegedly being obvious over the ’704 patent in view of U.S. Pat. No. 5,989,353 to Skee, *et al.* (“Skee”). Applicants respectfully traverse the rejection on the grounds that the Examiner has failed to show that every element of the rejected claims is found in the cited references.

First, as stated hereinabove, both the '704 patent and Skee are silent as to foam compositions. Accordingly, the motivation to create a foam from the compositions disclosed in the '704 patent and Skee must come from elsewhere in the art. The Examiner has not provided such a motivation, either from a cited reference, or from within the knowledge of an artisan of ordinary skill.

Second, the Examiner acknowledges that the '704 patent does not disclose a composition containing morpholine, as recited in claim 81. Instead, the Examiner relies on Skee for an alleged teaching of the equivalence of morpholine and other amine compositions disclosed in the '704 patent. However, Skee does not teach that morpholine would be effective in the compositions recited by the '704 patent. Neither does Skee teach that morpholine could be suitably used in compositions in the range of about 40 to 60% by weight as recited in claim 81. Accordingly, the combination of the '704 patent and Skee does not provide one of ordinary skill in the art either a motivation to use morpholine in the compositions of the present invention, or a reasonable expectation of success that morpholine would be effective at the claimed proportions.

Accordingly, Applicant respectfully submits that claim 81 is not obvious over the combination of the '704 patent and Skee, and request that the rejection of record be removed.

### **The Double Patenting Rejection**

Claims 1–23 have been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 10 of Cheng, and over claims 21 and 22 of the '704 patent. Specifically, the Examiner has asserted that the instant claims are not patentably distinct from the identified claims in Cheng and in the '704 patent because it would, in the Examiner's view, have been obvious to one of ordinary skill in the art to formulate a foam composition containing the components recited in the instant claims. Applicants respectfully traverse the rejection.

As is set forth in the MPEP, "any analysis employed in an obviousness-type double patenting rejection parallels the guidelines for analysis of a 35 U.S.C. § 103 obviousness determination *In re Braat*, 937 F.2d 589, 19 USPQ.2d 1289 (Fed. Cir. 1991). (see MPEP § 804 II B 1). Accordingly, Applicants respectfully traverse the rejection based upon the arguments employed with respect to the respective rejections under 35 U.S.C. § 103(a) set forth herein.

The rejected claims recite foam compositions. For reasons discussed at greater length hereinabove, both the '704 patent and Cheng are silent as to foam compositions. In particular, neither Cheng nor the '704 patent discloses passing a gas through the composition, and neither reference describes a formulation that has an agglomeration of bubbles. Accordingly, the motivation to create a foam from the compositions disclosed in the '704 patent and Cheng must come from elsewhere in the art. The Examiner has not provided such a motivation, either from a cited reference, or from within the knowledge of an artisan of ordinary skill.

Accordingly, Applicants respectfully submit that claims 1-23 are not obvious over claim 10 of Cheng, or over claims 21 and 22 of the '704 patent, and request that the rejection of record be removed.

### **CONCLUSION**

In view of the above remarks, Applicants respectfully submit that the subject application is in good and proper order for allowance. Withdrawal of the Examiner's rejections and early notification to this effect are earnestly solicited.

If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is encouraged to call the undersigned at (650) 843-4000.

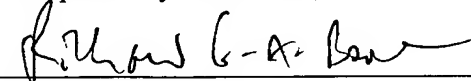
No fee is believed owed in connection with filing of this amendment and response. However, should the Commissioner determine otherwise, the Commissioner is authorized to charge any underpayment or credit any overpayment to Morgan, Lewis & Bockius LLP Deposit Account No. 50-0310 for the appropriate amount. A copy of this sheet is attached.

Date

:

October 27, 2004

Respectfully submitted,



Richard G.A. Bone  
Limited Recognition Under 37 C.F.R. § 10.9(b)  
Copy of Certificate attached hereto

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